



Figure 1.1. A shot from *Forza Motorsport 7*. (Image courtesy of Turn 10 Studios, Microsoft.)



Figure 1.2. The city of Beauclair rendered in *The Witcher 3*. (CD PROJEKT®, *The Witcher*® are registered trademarks of CD PROJEKT Capital Group. *The Witcher* game © CD PROJEKT S.A. Developed by CD PROJEKT S.A. All rights reserved. *The Witcher* game is based on the prose of Andrzej Sapkowski. All other copyrights and trademarks are the property of their respective owners.)

Advances in graphics hardware have fueled an explosion of research in the field of interactive computer graphics. We will focus on providing methods to increase speed and improve image quality, while also describing the features and limitations of acceleration algorithms and graphics APIs. We will not be able to cover every topic in depth, so our goal is to present key concepts and terminology, explain the most robust and practical algorithms in the field, and provide pointers to the best places to go for more information. We hope our attempts to provide you with tools for understanding this field prove to be worth the time and effort you spend with our book.